

- 1 1. In a heat pipe in which a boundary structure forms an
- 2 enclosed vapor chamber, the improvement comprising: at least
- 3 one mounting hole penetrating the heat pipe.
- 4 2. In a heat pipe in which a boundary structure forms an
- 5 enclosed vapor chamber, the improvement comprising: at least
- 6 one mounting hole penetrating the heat pipe, with the mounting
- 7 hole isolated from the vapor chamber by being located within a
- 8 sealed structure which is sealed to the boundary structure so
- 9 that the mounting hole through the heat pipe has no access to
- 10 the vapor chamber.
- 11 3. The heat pipe of claim 2 wherein the sealed structure is
- 12 a column spanning the boundary structure.
- 13 4. The heat pipe of claim 2 wherein the sealed structure is
- 14 a depression within one part of the boundary structure which
- 15 contacts and is bonded to another part of the boundary
- 16 structure.
- 17 5. The heat pipe of claim 2 wherein the sealed structure is
- 18 a lip located at an edge of the boundary structure which is
- 19 bonded to another lip at the edge of the boundary structure.
- 20 6. In a heat pipe in which a boundary structure forms an
- 21 enclosed vapor chamber, with a capillary wick within the heat
- 22 pipe attached to the part of the heat pipe which is in contact
- 23 with a heat source, so that the capillary wick acts as the heat
- 24 pipe evaporator, the improvement comprising: the capillary wick

1 being constructed with at least two separate sections of
2 different materials and with a section located at the part of
3 the heat pipe which is in contact with the heat source being
4 formed of a material with higher heat conductivity than
5 sections located at parts of the heat pipe not in contact with
6 the heat source.

7 7. The heat pipe of claim 6 wherein the section of higher
8 heat conductivity is constructed of sintered silver powder.

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